

SEQUENCE LISTING

(1) GENERAL INFORMATION

- (i) APPLICANT: Rath, Matthias
- (ii) TITLE OF INVENTION: METHOD OF PRODUCING
VACCINES FROM PRTOEIN SIGNAL OLIGOPEPTIDES
- (iii) NUMBER OF SEQUENCES: 360
- (iv) CORRESPONDENCE ADDRESS:
(A) ADDRESSEE: INHOUSE IP MANAGEMENT
(B) STREET: 280 Colorado Avenue
(C) CITY: Palo Alto
(D) STATE: California
(E) COUNTRY: USA
(F) ZIP: 94301
- (v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Floppy Disk, 3.50 inch,
1.44MB Storage
(B) COMPUTER: IBM PC COMPATIBLE
(C) OPERATING SYSTEM: WINDOWS 95
(D) SOFTWARE: MS WORD 6.0
- (vi) CURRENT APPLICATION DATA:
(A) APPLICATION NUMBER: NOT AVAILABLE
(B) FILING DATE: JANUARY 14, 1999
(C) CLASSIFICATION: 435
- (viii) ATTORNEY/AGENT INFORMATION:
(A) NAME: ALI KAMAREI
(B) REGISTRATION NUMBER: 37000
(C) REFERENCE/DOCKET NUMBER: 10262-1US
- (ix) TELECOMMUNICATION INFORMATION:
(A) TELEPHONE: 650-322-7371
(B) TELEFAX: 650-322-7389

(2) INFORMATION FOR SEQ ID NO: 1:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

00001976:064504

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

Asp Val Tyr Ala Gln Glu Lys Gln Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 2:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

Asp Val His Asn Gln Glu Lys Gln Asn
1 5

(2) INFORMATION FOR SEQ ID NO: 3:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 6
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

Glu Ile Arg Arg Glu Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 4:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

Glu Asp Glu Met Gly His Pro Glu Ile Gly Asp
1 5 10

(2) INFORMATION FOR SEQ ID NO: 5:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

00881976:061504

(2) INFORMATION FOR SEQ ID NO: 10:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

Asp	Asp	Ile	Met	Asp	Ser	Ser	Leu	Thr	Arg	Arg
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 11:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

Asp	Asp	Ile	Met	Asp	Ser	Ser	Tyr	Thr	Arg	Arg
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 12:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

Asp	Asp	Met	Met	Asp	Lys	Ser	Ile	Thr	Arg	Arg
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 13:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:

Lys	Leu	Tyr	Cys	Arg	Glu	Gln	Pro	Tyr	Tyr
1				5					10

00001976-064504

(2) INFORMATION FOR SEQ ID NO: 14:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:

Lys	Ser	His	Phe	Arg	Asn	Glu	Lys	Tyr	Tyr
1				5					10

(2) INFORMATION FOR SEQ ID NO: 15:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:

Arg	Phe	Thr	Glu	Lys	Arg	Tyr	Lys
1				5			

(2) INFORMATION FOR SEQ ID NO: 16:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:

Arg	Tyr	Thr	Glu	Lys	Arg	Tyr	Lys
1				5			

(2) INFORMATION FOR SEQ ID NO: 17:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:

Lys	Phe	Ser	Leu	Lys	Lys	His	Ser
1				5			

00001076:064800

(2) INFORMATION FOR SEQ ID NO: 18:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:

Lys Val Asp Leu Ser Lys Phe Ser Leu Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 19:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:

Lys Lys His Ser Phe Ile Val Thr Phe Lys Thr
1 5 10

(2) INFORMATION FOR SEQ ID NO: 20:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:

Asp Gly Glu Lys Glu His Ala Asn Ala Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 21:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:

Asp Gly Glu Lys Glu His Ala Asn Ala Leu Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 22:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:

Thr Asp Glu Lys Asp Leu Lys Gln Ala Arg Asp
1 5 10

(2) INFORMATION FOR SEQ ID NO: 23:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:

Lys Ile Gly Thr Asp Ile Gln Asp Asn Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 24:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 24:

Lys Val Gly Thr Asp Ile Gln Asp Asn Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 25:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 25:

Gln Arg Ala Thr Pro Glu Gln Tyr
1 5

(2) INFORMATION FOR SEQ ID NO: 26:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8

00001076 061501

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

Asp Glu Asn Tyr Gly Lys Lys Asp Ser
1 5

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(i) SEQUENCE CHARACTERISTICS
    (A) LENGTH: 9
    (B) TYPE: amino acid
    (C) STRANDEDNESS: single
    (D) TOPOLOGY: linear
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Arg Val Lys Ala Leu Tyr Glu Glu Leu
1 5

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(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
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Lys Cys Lys Lys Ile Phe Asn Asp Leu
1 5

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(i)  SEQUENCE CHARACTERISTICS
      (A) LENGTH: 10
      (B) TYPE: amino acid
      (C) STRANDEDNESS: single
      (D) TOPOLOGY: linear
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Lys Glu Ala Glu Lys Val Ala Arg Val Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 34:

Lys Asp Ser Val Ala Glu Ala Lys Cys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 35:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 35:

Lys Asp Pro Glu Lys Val Ala Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 36:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 36:

Gln Tyr Glu Glu Asp Ser Tyr Ser His
1 5

(2) INFORMATION FOR SEQ ID NO: 37:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 37:

Lys Tyr Glu Glu Asp Ser Tyr Asn Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 38:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 38:

0000497604504

Glu Tyr Glu Glu Ser Ile Ala Lys Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 39:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 39:

Arg Lys Ile Tyr Lys Arg Arg Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 40:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 40:

Asn Lys Ile Tyr Lys Arg Arg Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 41:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 41:

Asn Lys Val Tyr Lys Arg Ser Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 42:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 42:

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5

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(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
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Glu Val Leu Glu Glu Glu Glu Asp Arg Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Lys Gly Val Ser Ser Ser Thr Arg Lys
1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Ser Val Leu Glu Glu Glu Glu Asp Asn Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Asp	Glu	Asn	Val	Ser	Lys	Arg	Ile	Glu	Pro
1				5					10

[illegible]

(2) INFORMATION FOR SEQ ID NO: 51:

(i) SEQUENCE CHARACTERISTICS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 51:

(2) INFORMATION FOR SEQ ID NO: 52:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 52:

(2) INFORMATION FOR SEQ ID NO: 53:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 53:

(2) INFORMATION FOR SEQ ID NO: 54:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 54:

(2) INFORMATION FOR SEQ ID NO: 55:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 55:

Lys	Lys	Gln	Ile	Glu	Ser	Cys	Cys	Arg	Arg	Glu
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 56:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 56:

Gln	Lys	Cys	Asp	Ser	Val	Glu	Glu
1				5			

(2) INFORMATION FOR SEQ ID NO: 57:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 57:

Glu	Lys	Leu	Ser	Ser	Val	Glu	Glu
1				5			

(2) INFORMATION FOR SEQ ID NO: 58:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 58:

His	Val	Ser	Thr	Thr	Glu	Glu
1				5		

(2) INFORMATION FOR SEQ ID NO: 59:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 7

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(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 59:

Glu Thr Leu Ile Ser Asp Gln
1 5

(2) INFORMATION FOR SEQ ID NO: 60:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 60:

Glu Glu Thr Gly Ile Asn Arg Glu Arg Lys Val Glu
1 5 10

(2) INFORMATION FOR SEQ ID NO: 61:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 61:

Glu Glu Pro Gly Val Ser Gln Asp Arg Lys Val Glu
1 5 10

(2) INFORMATION FOR SEQ ID NO: 62:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 62:

Glu Ala Ser Ser Lys Glu Glu Thr Glu Ala
1 5 10

(2) INFORMATION FOR SEQ ID NO: 63:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single

000049430000

- (i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 15
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 67:

Glu Val Glu Trp Val Leu Glu Thr Glu Leu Lys Ala
 1 5 10
 Pro Arg Pro
 15

(2) INFORMATION FOR SEQ ID NO: 68:

- (i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 9
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 68:

Arg Glu Pro Arg Pro Asn Glu Glu Cys
 1 5

(2) INFORMATION FOR SEQ ID NO: 69:

- (i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 8
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 69:

Glu Leu Lys Ala Pro Arg Pro Met
 1 5

(2) INFORMATION FOR SEQ ID NO: 70:

- (i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 9
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 70:

Glu Glu Pro Arg Pro Leu Asp Glu Cys
 1 5

(2) INFORMATION FOR SEQ ID NO: 71:

00001076:064504

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 15
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 71:

His	Glu	Arg	Gly	Val	Ser	Ile	Arg	Arg	Gln	Leu	Leu
1				5					10		
Ser	Lys	Lys									
		15									

(2) INFORMATION FOR SEQ ID NO: 72:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 15
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 72:

Pro	Arg	Glu	Gly	Val	Ala	Ile	Arg	Arg	Gln	Met	Leu
1				5					10		
Ser	Asp	Lys									
		15									

(2) INFORMATION FOR SEQ ID NO: 73:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 14
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 73:

Pro	Glu	Arg	Gly	Val	Ala	Val	Arg	Arg	Gln	Ile	Ile
1				5					10		
Ser	Lys										

(2) INFORMATION FOR SEQ ID NO: 74:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 74:

Pro	Phe	Arg	Ala	Val	Glu	Leu	Arg	Arg	Leu	Asp	Leu
1				5					10		

(2) INFORMATION FOR SEQ ID NO: 75:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 75:

Leu	Gln	Tyr	Leu	Pro	Tyr	Arg	Asp	Tyr	Asn
1				5					10

(2) INFORMATION FOR SEQ ID NO: 76:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 76:

Ile	Glu	Arg	Ile	Pro	Tyr	Lys	Asp	Tyr	Asp
1				5					10

(2) INFORMATION FOR SEQ ID NO: 77:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 77:

Leu	Gln	Ser	Leu	Pro	Tyr	Lys	Asn	Tyr	Asn
1				5					10

(2) INFORMATION FOR SEQ ID NO: 78:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 78:

Leu	Glu	Lys	Leu	Pro	Tyr	Ala	Ser	Tyr	Asp
1				5					10

(2) INFORMATION FOR SEQ ID NO: 79:

000459-9257330

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 79:

Cys Leu Asp Glu Lys Glu Phe Gln
1 5

(2) INFORMATION FOR SEQ ID NO: 80:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 80:

Cys Leu Asp Gly Lys Glu Tyr Gln
1 5

(2) INFORMATION FOR SEQ ID NO: 81:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 81:

Leu Leu Asn Asn Lys Glu Tyr Gln
1 5

(2) INFORMATION FOR SEQ ID NO: 82:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 82:

Leu Leu Asp Gly Gln Glu Phe Gln
1 5

(2) INFORMATION FOR SEQ ID NO: 83:

- (i) SEQUENCE CHARACTERISTICS

00001675-054604

(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 83:

Leu Leu Asp Gly Arg Ser His Tyr
1 5

(2) INFORMATION FOR SEQ ID NO: 84:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 84:

Arg Leu Pro Arg Ala Cys Asp Ser Ala Glu Val Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 85:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 85:

Arg Leu Pro Thr Ala Cys Asp Ala Ala Glu Val Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 86:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 86:

Arg Leu Pro Ser Ala Gln Glu Ala Gly Ala Ile Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 87:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid

(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 87:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 91:

Cys	Lys	Asp	Asn	Pro	Gly	Glu	Asn	Ala	Arg
1				5					10

(2) INFORMATION FOR SEQ ID NO: 92:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 92:

Ser	Thr	Glu	Thr	Pro	Gly	Lys	Asn	Ala	Cys
1				5					10

(2) INFORMATION FOR SEQ ID NO: 93:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 93:

Asn	Ile	His	Gly	Ser	Gly	Leu	Asn	Ala	Ser
1				5					10

(2) INFORMATION FOR SEQ ID NO: 94:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 94:

His	Asn	Arg	Ser	Lys	Ile	Asn	Leu	Gln	Asp
1				5					10

(2) INFORMATION FOR SEQ ID NO: 95:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 95:

0001976 064500

Asp Val Ala Ser Leu Thr Asp Tyr Leu Lys Ser Lys
 1 5 10
 Arg

(2) INFORMATION FOR SEQ ID NO: 100:

(i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 13
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 100:

Asp Tyr Ser Lys Tyr Met Asp Asn Arg Arg Ala Lys
 1 5 10
 Asp

(2) INFORMATION FOR SEQ ID NO: 101:

(i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 13
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 101:

Asp Tyr Ser Lys Tyr Leu Asp Asn Arg Arg Ala Lys
 1 5 10
 Asp

(2) INFORMATION FOR SEQ ID NO: 102:

(i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 13
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 102:

Asp Tyr Ser Lys Tyr Leu Asp Ser Arg Arg Ala Gln
 1 5 10
 Gln

(2) INFORMATION FOR SEQ ID NO: 103:

(i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 8

00941976 05460
 109450 9/25/85

- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 103:

Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5

(2) INFORMATION FOR SEQ ID NO: 104:

- (i) SEQUENCE CHARACTERISTICS
 - (A) LENGTH: 7
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 104:

Asp Ser Arg Arg Ala Gln Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 105:

- (i) SEQUENCE CHARACTERISTICS
 - (A) LENGTH: 13
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 105:

Asp Tyr Ser Lys Tyr Leu Asp Ser Arg Arg Ala Gln
1 5 10
Asp

(2) INFORMATION FOR SEQ ID NO: 106:

- (i) SEQUENCE CHARACTERISTICS
 - (A) LENGTH: 13
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 106:

Asp Val Ala Ser Leu Thr Asp Tyr Leu Lys Ser Lys
1 5 10
Arg

(2) INFORMATION FOR SEQ ID NO: 107:

- (i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 107:

Asp Tyr Ser Lys Tyr Met Asp Asn Arg Arg Ala Lys
1 5 10
Asp

(2) INFORMATION FOR SEQ ID NO: 108:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 108:

Asp Tyr Ser Lys Tyr Leu Asp Asn Arg Arg Ala Lys
1 5 10
Asp

(2) INFORMATION FOR SEQ ID NO: 109:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 109:

Asp Tyr Ser Lys Tyr Leu Asp Ser Arg Arg Ala Gln
1 5 10
Gln

(2) INFORMATION FOR SEQ ID NO: 110:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 110:

Asp Tyr Ser Lys Phe Leu Asp Thr Arg Arg Ala Gln

00001076 051504

1
Asp

5

10

(2) INFORMATION FOR SEQ ID NO: 111:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 111:

Asp Tyr Ser Lys Tyr Gln Glu Glu Arg Met Ala Gln
1 5 10
Asp

(2) INFORMATION FOR SEQ ID NO: 112:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 112:

Asp Tyr Ser Lys Tyr Leu Glu Thr Arg Arg Ala Gln
1 5 10
Asp

(2) INFORMATION FOR SEQ ID NO: 113:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 113:

Asp Tyr Ser Lys Tyr Leu Asp Asn Arg Arg Thr Lys
1 5 10
Asp

(2) INFORMATION FOR SEQ ID NO: 114:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 114:

Asp Met Ser Ser Tyr Leu Glu Glu Lys Ala Ala Lys
1 5 10
Glu

(2) INFORMATION FOR SEQ ID NO: 115:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 115:

Asp Phe Asn Lys Ala Leu Asp Ile Lys Ala Ala Gln
1 5 10
Glu

(2) INFORMATION FOR SEQ ID NO: 116:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 116:

Asp Pro Leu Ser Asp Pro Asp Gln Met
1 5

(2) INFORMATION FOR SEQ ID NO: 117:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 117:

Asn Glu Asp Lys Arg His Ser Gln
1 5

(2) INFORMATION FOR SEQ ID NO: 118:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid

(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 118:

Lys	Asp	Glu	Pro	Arg	Glu	Leu	Ser	Asn	Met	Lys	Arg
1				5					10		
His	Ser	Glu									
		15									

(2) INFORMATION FOR SEQ ID NO: 119:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 119:

Arg	Glu	Leu	Ser	Asn	Met	Lys	Arg	His
1				5				

(2) INFORMATION FOR SEQ ID NO: 120:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 120:

Glu	Ala	Arg	Glu	Leu	Ser	Thr	Pro	Lys	Xaa	His	Ser
1				5					10		
Glu											

(2) INFORMATION FOR SEQ ID NO: 121:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 121:

Glu	Asp	Pro	Asp	Gln	Ile	Asn	Glu	Asp	Lys	Arg	His
1				5					10		

(2) INFORMATION FOR SEQ ID NO: 122:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 122:

Asp Asp Pro Asp Gln Met Asn Glu Asp Lys Arg His
1 5 10
Ser Gln

(2) INFORMATION FOR SEQ ID NO: 123:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 123:

Gly Asp Pro Asp Gln Ile Asn Glu Asp Lys Arg His
1 5 10
Ser Gln

(2) INFORMATION FOR SEQ ID NO: 124:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 124:

Asp Glu Ser Arg Gln Leu Asn Glu Val Lys Arg His
1 5 10
Ser Gln

(2) INFORMATION FOR SEQ ID NO: 125:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 125:

Met Asn Thr Lys Arg Asn Arg Asn Asn
1 5

(2) INFORMATION FOR SEQ ID NO: 126:

[illegible]

Lys Gln Gly Gln Asp Arg Arg Glu
1 5

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Ala Asp Pro Ser Lys Lys Gln
1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Arg Thr Asp Leu Ser Lys Lys Gln
1 5

```
(i)  SEQUENCE CHARACTERISTICS
      (A) LENGTH:      7
      (B) TYPE:        amino acid
      (C) STRANDEDNESS: single
      (D) TOPOLOGY:    linear
```

Ala Asp Leu Ser Lys Lys Gln
1 5

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 146:

Asp Leu Ser Lys Lys Gln Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 147:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 147:

Trp Leu Glu Glu Glu Glu Ala
1 5

(2) INFORMATION FOR SEQ ID NO: 148:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 148:

Trp Met Glu Glu Glu Glu Ala
1 5

(2) INFORMATION FOR SEQ ID NO: 149:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 149:

Trp Val Glu Glu Glu Glu Ala
1 5

(2) INFORMATION FOR SEQ ID NO: 150:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

00004076 054504
1054504 054504

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 150:

Trp Ala Glu Glu Glu Glu Ala
1 5

(2) INFORMATION FOR SEQ ID NO: 151:

```
(i) SEQUENCE CHARACTERISTICS
    (A) LENGTH:      8
    (B) TYPE:        amino acid
    (C) STRANDEDNESS: single
    (D) TOPOLOGY:    linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 151:

Pro' Met Glu Glu Glu Glu Glu Ala
1 5

(2) INFORMATION FOR SEQ ID NO: 152:

```
(i)  SEQUENCE CHARACTERISTICS
      (A) LENGTH: 11
      (B) TYPE: amino acid
      (C) STRANDEDNESS: single
      (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 152:

Asp 1 Phe Gly Arg Arg 5 Ser Ala Glu Asp 10 Glu Asn

(2) INFORMATION FOR SEQ ID NO: 153:

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 153:

Met Asp Phe Gly Arg Arg Ser
1 5

(2) INFORMATION FOR SEQ ID NO: 154:

```
(i)  SEQUENCE CHARACTERISTICS
      (A) LENGTH:       7
      (B) TYPE:         amino acid
      (C) STRANDEDNESS: single
      (D) TOPOLOGY:     linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 154:

Parameter	Value	Unit	Source
α_1	0.0000		Assumed
α_2	0.0000		Assumed
α_3	0.0000		Assumed
α_4	0.0000		Assumed
α_5	0.0000		Assumed
α_6	0.0000		Assumed
α_7	0.0000		Assumed
α_8	0.0000		Assumed
α_9	0.0000		Assumed
α_{10}	0.0000		Assumed
α_{11}	0.0000		Assumed
α_{12}	0.0000		Assumed
α_{13}	0.0000		Assumed
α_{14}	0.0000		Assumed
α_{15}	0.0000		Assumed
α_{16}	0.0000		Assumed
α_{17}	0.0000		Assumed
α_{18}	0.0000		Assumed
α_{19}	0.0000		Assumed
α_{20}	0.0000		Assumed
α_{21}	0.0000		Assumed
α_{22}	0.0000		Assumed
α_{23}	0.0000		Assumed
α_{24}	0.0000		Assumed
α_{25}	0.0000		Assumed
α_{26}	0.0000		Assumed
α_{27}	0.0000		Assumed
α_{28}	0.0000		Assumed
α_{29}	0.0000		Assumed
α_{30}	0.0000		Assumed
α_{31}	0.0000		Assumed
α_{32}	0.0000		Assumed
α_{33}	0.0000		Assumed
α_{34}	0.0000		Assumed
α_{35}	0.0000		Assumed
α_{36}	0.0000		Assumed
α_{37}	0.0000		Assumed
α_{38}	0.0000		Assumed
α_{39}	0.0000		Assumed
α_{40}	0.0000		Assumed
α_{41}	0.0000		Assumed
α_{42}	0.0000		Assumed
α_{43}	0.0000		Assumed
α_{44}	0.0000		Assumed
α_{45}	0.0000		Assumed
α_{46}	0.0000		Assumed
α_{47}	0.0000		Assumed
α_{48}	0.0000		Assumed
α_{49}	0.0000		Assumed
α_{50}	0.0000		Assumed
α_{51}	0.0000		Assumed
α_{52}	0.0000		Assumed
α_{53}	0.0000		Assumed
α_{54}	0.0000		Assumed
α_{55}	0.0000		Assumed
α_{56}	0.0000		Assumed
α_{57}	0.0000		Assumed
α_{58}	0.0000		Assumed
α_{59}	0.0000		Assumed
α_{60}	0.0000		Assumed
α_{61}	0.0000		Assumed
α_{62}	0.0000		Assumed
α_{63}	0.0000		Assumed
α_{64}	0.0000		Assumed
α_{65}	0.0000		Assumed
α_{66}	0.0000		Assumed
α_{67}	0.0000		Assumed
α_{68}	0.0000		Assumed
α_{69}	0.0000		Assumed
α_{70}	0.0000		Assumed
α_{71}	0.0000		Assumed
α_{72}	0.0000		Assumed
α_{73}	0.0000		Assumed
α_{74}	0.0000		Assumed
α_{75}	0.0000		Assumed
α_{76}	0.0000		Assumed
α_{77}	0.0000		Assumed
α_{78}	0.0000		Assumed
α_{79}	0.0000		Assumed
α_{80}	0.0000		Assumed
α_{81}	0.0000		Assumed
α_{82}	0.0000		Assumed
α_{83}	0.0000		Assumed
α_{84}	0.0000		Assumed
α_{85}	0.0000		Assumed
α_{86}	0.0000		Assumed
α_{87}	0.0000		Assumed
α_{88}	0.0000		Assumed

(i) SEQUENCE CHARACTERISTICS

(A)	LENGTH:	11
(B)	TYPE:	amino acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

Arg	Arg	Ser	Ala	Glu	Asp	Gly	Asp	Gln	His	Pro
1				5					10	

(i) SEQUENCE CHARACTERISTICS

(A)	LENGTH:	9
(B)	TYPE:	amino acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

Arg Asp Leu Glu Leu Pro Trp Leu Glu
 1 5

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

Arg 1	Gly	Lys	Glu	Pro 5	His	Glu	Leu	Asp	Arg 10
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(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Arg Gly Gln Glu Pro Leu Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 159:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 159:

Glu Pro His Trp Leu Asn Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 160:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 160:

Lys Pro Arg Ser Gln Gln Pro Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 161:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 161:

Lys Pro Gly Phe Gln Leu Gln Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 162:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 162:

Lys Pro His Ser His Leu Gln Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 163:

09881976 064501

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 167:

Gly Trp Leu Pro Gly Gly Lys Arg Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 168:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 168:

His Gly Trp Tyr Pro Gly Gly Lys Arg Asp
1 5 10

(2) INFORMATION FOR SEQ ID NO: 169:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 169:

Gln His Tyr Ser Leu Glu Trp Lys Pro Gly
1 5 10

(2) INFORMATION FOR SEQ ID NO: 170:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 170:

Arg Pro Gly Gly Lys Arg Asp Ala Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 171:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid

00331979-06450
105190-92518350

[illegible]

Arg 1	Pro	Gly	Gly	Lys 5	Arg	Asn	Thr	Glu	His 10
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(i) SEQUENCE CHARACTERISTICS

(A)	LENGTH:	9
(B)	TYPE:	amino acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

Gln Pro Gly Gly Lys Arg Asp Ala Glu
1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 6
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Gln Ala Ser Lys Asp Arg
1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 6
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Lys Ile Asp Asp Lys Gly
1 5

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 5
(B) TYPE: amino acid

[illegible]

Trp Asn Lys Asp Glu
1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 6
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Glu Val Glu Arg Ala Arg
1 5

(i) SEQUENCE CHARACTERISTICS

(A)	LENGTH:	9
(B)	TYPE:	amino acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

His Arg Arg Leu Phe His Lys Ser Asp
1 5

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Lys Thr Pro Phe Pro Asp Ser
1 5

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 6
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 179:

Tyr Glu Lys Glu Val Pro
1 5

(2) INFORMATION FOR SEQ ID NO: 180:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 180:

Glu Val Asp Leu Arg Lys Pro
1 5

(2) INFORMATION FOR SEQ ID NO: 181:

(i) SEQUENCE CHARACTERISTICS

(A)	LENGTH:	8
(B)	TYPE:	amino acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 181:

Lys Val Lys Ile Glu Val Asn Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 182:

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 182:

Ala Arg Met Ala Pro Glu Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 183:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 6
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 183:

5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Lys Met Pro Phe Pro Glu Ser
1 5

(i) SEQUENCE CHARACTERISTICS

(A)	LENGTH:	7
(B)	TYPE:	amino acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

Lys Thr Pro Phe Leu Glu Ala
1 5

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

His His Arg Leu Phe His Lys Ser Asp
1 5

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

His Gln Arg Leu Phe His Lys Ser Asp
1 5

[illegible]

(2) INFORMATION FOR SEQ ID NO: 192:

(i) SEQUENCE CHARACTERISTICS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 192:

(2) INFORMATION FOR SEQ ID NO: 193:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 193:

(2) INFORMATION FOR SEQ ID NO: 194:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 194:

(2) INFORMATION FOR SEQ ID NO: 195:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 195:

(2) INFORMATION FOR SEQ ID NO: 196:

Parameter	Value	Unit	Source
α	0.001	deg	Table 1
β	0.001	deg	Table 1
γ	0.001	deg	Table 1
δ	0.001	deg	Table 1
ϵ	0.001	deg	Table 1
ζ	0.001	deg	Table 1
η	0.001	deg	Table 1
θ	0.001	deg	Table 1
ϕ	0.001	deg	Table 1
χ	0.001	deg	Table 1
ψ	0.001	deg	Table 1
ω	0.001	deg	Table 1
ν	0.001	deg	Table 1
μ	0.001	deg	Table 1
λ	0.001	deg	Table 1
κ	0.001	deg	Table 1
ι	0.001	deg	Table 1
\hbar	0.001	deg	Table 1
g	0.001	deg	Table 1
f	0.001	deg	Table 1
e	0.001	deg	Table 1
d	0.001	deg	Table 1
c	0.001	deg	Table 1
b	0.001	deg	Table 1
a	0.001	deg	Table 1
z	0.001	deg	Table 1
y	0.001	deg	Table 1
x	0.001	deg	Table 1
w	0.001	deg	Table 1
v	0.001	deg	Table 1
u	0.001	deg	Table 1
t	0.001	deg	Table 1
s	0.001	deg	Table 1
r	0.001	deg	Table 1
q	0.001	deg	Table 1
p	0.001	deg	Table 1
o	0.001	deg	Table 1
n	0.001	deg	Table 1
m	0.001	deg	Table 1
l	0.001	deg	Table 1
k	0.001	deg	Table 1
j	0.001	deg	Table 1
i	0.001	deg	Table 1
h	0.001	deg	Table 1
g	0.001	deg	Table 1
f	0.001	deg	Table 1
e	0.001	deg	Table 1
d	0.001	deg	Table 1
c	0.001	deg	Table 1
b	0.001	deg	Table 1
a	0.001	deg	Table 1
z	0.001	deg	Table 1
y	0.001	deg	Table 1
x	0.001	deg	Table 1
w	0.001	deg	Table 1
v	0.001	deg	Table 1
u	0.001	deg	Table 1
t	0.001	deg	Table 1
s	0.001	deg	Table 1
r	0.001	deg	Table 1
q	0.001	deg	Table 1
p	0.001	deg	Table 1
o	0.001	deg	Table 1
n	0.001	deg	Table 1
m	0.001	deg	Table 1
l	0.001	deg	Table 1
k	0.001	deg	Table 1
j	0.001	deg	Table 1
i	0.001	deg	Table 1
h	0.001	deg	Table 1
g	0.001	deg	Table 1
f	0.001	deg	Table 1
e	0.001	deg	Table 1
d	0.001	deg	Table 1
c	0.001	deg	Table 1
b	0.001	deg	Table 1
a	0.001	deg	Table 1
z	0.001	deg	Table 1
y	0.001	deg	Table 1
x	0.001	deg	Table 1
w	0.001	deg	Table 1
v	0.001	deg	Table 1
u	0.001	deg	Table 1
t	0.001	deg	Table 1
s	0.001	deg	Table 1
r	0.001	deg	Table 1
q	0.001	deg	Table 1
p	0.001	deg	Table 1
o	0.001	deg	Table 1
n	0.001	deg	Table 1
m	0.001	deg	Table 1

[illegible]

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

His Ala Lys Leu Asn Ile Gly Tyr Ile Lys Asp Leu
1 5 10
Lys

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Lys Asp Lys Met Ala Glu Asp Glu Val Glu
1 5 10

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Lys Asp Thr Leu Asp Glu Asp Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 200:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 200:

Lys Leu Glu Glu His Tyr Glu Leu Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 201:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 201:

Lys Leu Ala Gln Ser Tyr Glu Leu Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 202:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 202:

Glu Arg Asn Asp Leu Phe Leu Ser Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 203:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 203:

Asp Val Asn Glu Glu Gly Thr Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 204:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8

00391976-06400
FOI 90-92613360

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 208:

Glu Lys Ser Ala Arg Phe Lys Glu Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 209:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 6

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 209:

Glu Glu Ala Arg Lys Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 210:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 6

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 210:

Glu Glu Ala Arg Glu Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 211:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 211:

Lys Thr Gln Thr Lys Gly Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 212:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

09881976 054504

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 212:

Lys Thr Gln Thr Lys Gly Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 213:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 213:

Glu Gly Ser Val Asp Gly Asp Thr Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 214:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 214:

Glu Gly Ser Val Asp Glu Asp Thr Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 215:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 215:

Asp Ser Ala Asp Ala Glu Glu Asp Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 216:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 216:

00004076-051400

Glu Glu Glu Glu Val Ala Glu Val Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 217:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 217:

Glu Glu Glu Glu Ala Asp Asp Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 218:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 218:

Ala Asp Asp Asp Glu Asp Glu Glu Asp Gly
1 5 10

(2) INFORMATION FOR SEQ ID NO: 219:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 219:

Asp Glu Asp Gly Asp Glu Val Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 220:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 220:

Glu Glu Ala Glu Glu Pro Tyr Glu Glu
1 5

00004076 064904
1057490 9207880

(2) INFORMATION FOR SEQ ID NO: 221:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 221:

Ala Asp Val Glu Glu Glu Glu Ala Asp Asp Glu
1 5 10
Asp Val Glu
15

(2) INFORMATION FOR SEQ ID NO: 222:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 222:

Lys Ala Lys Glu Arg Leu Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 223:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 223:

Glu Ala Lys His Arg Glu Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 224:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 224:

Arg Glu Trp Glu Glu Ala Glu Arg
1 5

00001975 000400

[illegible]

(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Arg Ala Glu Gln Lys Asp Arg
1 5

(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Glu Pro Glu Thr Glu Pro Asp Val Arg
1 5

(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Glu Gly Glu Pro Glu Val Thr Asp
1 5

(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Glu Thr Glu Pro Glu Pro Glu Leu Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 229:

(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 233:

His Pro Arg Lys Met Lys Arg Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 234:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 234:

His Leu Arg Lys Met Arg Lys Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 235:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 235:

Arg Asp Arg Leu Asp Glu Val Lys Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 236:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 6
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 236:

Arg Ala Arg Met Glu Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 237:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 6
(B) TYPE: amino acid

0054976-004800

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Glu Gly Glu Glu Gly Gly Asp Phe Asp Glu Ala Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Asp Glu Ala Lys Leu Ala Glu Ala Arg Glu Met Ile
1 5 10
Arg

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH:	9
(B) TYPE:	amino acid
(C) STRANDEDNESS:	single
(D) TOPOLOGY:	linear

Asp Met Val Met Arg Lys Arg Arg Asn
1 5

(i) SEQUENCE CHARACTERISTICS

(A)	LENGTH:	21
(B)	TYPE:	amino acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

Arg 1	Lys	Arg	Arg	Asn 5	Thr	Asn	Tyr	Thr	Gln 10	Val	Pro
Asn	Lys	Asp 15	Ala	Asp	Glu	Asp	Asp 20	Leu			

(2) INFORMATION FOR SEQ ID NO: 245:

[illegible]

Lys Ala Arg Lys Arg Lys Thr Lys Lys
1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Lys Lys Pro Pro Lys Arg Pro Glu
1 5

(i) SEQUENCE CHARACTERISTICS

(A)	LENGTH:	9
(B)	TYPE:	amino acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

Arg Asp Ala Arg Glu Ala Ile Asp Arg
1 5

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Arg 1	Glu	Tyr	Met	Arg 5	Glu	Gln	Asp	Arg	Lys 10
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 7

(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 249:

Arg Lys Arg Asn Lys Ala Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 250:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 250:

Glu Asp Glu Ala Gly Asp Glu Asp Glu Leu
1 5 10

(2) INFORMATION FOR SEQ ID NO: 251:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 23
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 251:

Arg Lys Arg Asn Lys Ala Arg Tyr Ser Pro Leu His
1 5 10
Asn Glu Asp Glu Ala Gly Asp Glu Asp Glu Leu
15 20

(2) INFORMATION FOR SEQ ID NO: 252:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 252:

Lys Glu Glu Ala Glu Lys Lys Ala Ala Glu Gln Arg
1 5 10

(2) INFORMATION FOR SEQ ID NO: 253:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8

00001076 0054504

(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 253:

His Ala Asp Arg Arg Leu Met Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 254:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 254:

Asp Val Glu Arg Gln Ser Thr Asp Ala Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 255:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 255:

Lys Ile Glu Gly Asp Leu Lys Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 256:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 256:

Glu Leu Arg Pro Gln Leu Glu Glu Ala Asp
1 5 10

(2) INFORMATION FOR SEQ ID NO: 257:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single

00001976 00000000

[illegible]

Asp Ser Gln Tyr Gln Glu Ala Arg Glu Ala Glu Glu
1 5 10

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Arg Leu Lys Lys Thr Glu Ala Glu Lys
1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Ala Lys Thr Lys Gln Lys Ala
1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Asp Leu Ala Arg Ser Ala Asp Lys Ser
1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 261:

Lys Glu Pro Ile Glu Val Glu Pro Leu Pro Asn Asp
1 5 10
Arg

(2) INFORMATION FOR SEQ ID NO: 262:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 262:

Arg Val Gln Ser Arg Gly Val Glu Asp Gly Gly Arg
1 5 10
Ser Pro Lys
15

(2) INFORMATION FOR SEQ ID NO: 263:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 263:

Glu Ser His Gln Val Glu Lys Arg Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 264:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 264:

Asn Pro Gln Met Asp Lys Arg Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 265:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

00001977 00000000

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 265:

Asp His Arg Val Asp Lys Arg Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 266:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 266:

Lys Arg Asn Ala Val Glu Val Leu Lys Arg Glu
1 : 5 10

(2) INFORMATION FOR SEQ ID NO: 267:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 267:

Lys Arg Asn Val Ala Glu Asp Pro Asn Arg Glu
1 5 10

(2) INFORMATION FOR SEQ ID NO: 268:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 268:

Arg Arg Asn Ala Glu Val Val Asp Val Glu
1 5 10

(2) INFORMATION FOR SEQ ID NO: 269:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 269:

Leu Lys Asn Asp Gly Arg Gln Val Glu Lys Arg Arg
1 5 10
Asn

(2) INFORMATION FOR SEQ ID NO: 270:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 270:

Lys Asn Asp Gly Arg Gln Val Glu Lys Arg Arg
1 5 10

(2) INFORMATION FOR SEQ ID NO: 271:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 271:

Lys Asp Asp Trp Arg Lys Ile Pro Lys Gln Arg
1 5 10

(2) INFORMATION FOR SEQ ID NO: 272:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 272:

Lys Lys Val Glu Arg Gln Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 273:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 273:

00001976-064504

Asp Gly Val Pro Val Glu Lys Lys Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 274:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 274:

Arg Gly Asp His Arg Asp Asn
1 5

(2) INFORMATION FOR SEQ ID NO: 275:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 6
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 275:

Asp Glu His Glu Arg Trp
1 5

(2) INFORMATION FOR SEQ ID NO: 276:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 276:

Asp Glu Asp Asp Arg Trp Thr Lys Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 277:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 277:

Glu Phe Ala Asp Arg Asp Glu Val Arg

00001976 000004

1

5

(2) INFORMATION FOR SEQ ID NO: 278:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 278:

Glu Val Ala His Arg Asp Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 279:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 279:

Glu Val Ala Asp Arg Asp Glu Val Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 280:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 280:

Arg Tyr Asp Glu Tyr Lys Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 281:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 5

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 281:

Arg Ser Gly Glu Pro
1 5

00001076:064504

(2) INFORMATION FOR SEQ ID NO: 282:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 282:

Arg	Asn	Gly	Asp	Gln	Gln	Gly	Ile	His	His
1				5					10

(2) INFORMATION FOR SEQ ID NO: 283:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 6
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 283:

Ala	Arg	Gln	Arg	Arg	Pro
1				5	

(2) INFORMATION FOR SEQ ID NO: 284:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 284:

Arg	Asp	Asp	Asn	Asp	Arg	Asp	Pro	Ser	Ala	Lys
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 285:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 285:

Lys	Val	Ser	Lys	Arg	Pro	Asp	Tyr	Asp
1				5				

(2) INFORMATION FOR SEQ ID NO: 286:

00004976.06400

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 286:

Glu	Ala	Phe	Glu	Cys	Phe	Glu	Ser	Asp	Pro	Asn	Ala
1				5					10		
Lys											

(2) INFORMATION FOR SEQ ID NO: 287:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 287:

Lys	Cys	Arg	Lys	Lys	Tyr	Glu	Phe	Cys	Arg
1				5					10

(2) INFORMATION FOR SEQ ID NO: 288:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 288:

His	Arg	His	Gln	Arg	Thr	Pro	Glu	Asn	Tyr	Pro	Asn
1				5					10		
Asp											

(2) INFORMATION FOR SEQ ID NO: 289:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 289:

Asp	Pro	Ser	Ile	Arg	Trp	Glu	Tyr	Cys
-----	-----	-----	-----	-----	-----	-----	-----	-----

00004076 00150 00000000

1

5

(2) INFORMATION FOR SEQ ID NO: 290:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 290:

His	Gln	His	Lys	Arg	Thr	Pro	Glu	Asn	His	Pro	Asn
1				5					10		
Asp	Asp										

(2) INFORMATION FOR SEQ ID NO: 291:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 291:

Met	Asp	Pro	Ser	Val	Arg	Arg	Glu	Tyr	Cys
1				5					10

(2) INFORMATION FOR SEQ ID NO: 292:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 292:

Arg	Thr	Pro	Glu	Asn	Tyr	Pro	Asn	Gly
1				5				

(2) INFORMATION FOR SEQ ID NO: 293:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 293:

Leu	Glu	Ala	Pro	Ser	Lys	Gln	Ala
1				5			

00881976:064504

(2) INFORMATION FOR SEQ ID NO: 294:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 294:

Leu	Glu	Ala	Phe	Leu	Gln	Glu	Pro	Thr	Glu	Glu
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 295:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 295:

Gly	His	Leu	Ala	Gly	Gly	Thr	Asp	Arg
1				5				

(2) INFORMATION FOR SEQ ID NO: 296:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 296:

Glu	Arg	Arg	Lys	Asp	Arg	Gly	Gly	Arg	Glu	Asp
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 297:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 297:

Glu	Ser	Arg	Lys	Asn	Arg	Gly	Gly	Arg	Glu	Glu
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 298:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 298:

Glu	Ser	Lys	Gly	Lys	Arg	Ala	Gly	Arg	Glu	Gln
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 299:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 299:

Lys	Glu	Gly	Phe	Arg	Asn	Lys	Val	Pro	Cys	Leu	Gln
1				5					10		
Glu											

(2) INFORMATION FOR SEQ ID NO: 300:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 300:

Gly	Glu	Glu	Glu	Leu	Arg	Arg	Arg	Leu	Arg
1				5				10	

(2) INFORMATION FOR SEQ ID NO: 301:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 12
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 301:

His	Glu	Arg	Glu	Glu	Glu	Leu	Arg	Lys	Arg	Leu	Arg
1				5					10		

(2) INFORMATION FOR SEQ ID NO: 302:

00881976-06450
00881976-06450

00881976-06450

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 306:

Glu Pro Gln Asp Asp Ala Arg Leu Leu Gln Ala Val
1 5 10
Lys

(2) INFORMATION FOR SEQ ID NO: 307:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 307:

Pro Glu Glu Arg Arg Leu Leu Asx
1 5

(2) INFORMATION FOR SEQ ID NO: 308:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 308:

Trp Arg Asp Met Glu Pro Pro Leu Arg Glu
1 5 10

(2) INFORMATION FOR SEQ ID NO: 309:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 309:

Trp Arg Asp Met Glu Pro Pro Leu Arg Glu
1 5 10

(2) INFORMATION FOR SEQ ID NO: 310:

- (i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 310:

Gln Lys Ser Met Glu Pro Pro Leu Arg Glu
1 5 10

(2) INFORMATION FOR SEQ ID NO: 311:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 311:

Lys Lys Lys Arg Gly Trp Tyr Lys Trp Leu Arg Lys
1 5 10
Leu

(2) INFORMATION FOR SEQ ID NO: 312:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 312:

Lys Arg Arg Lys Gly Trp Phe Gln Trp Leu Arg Lys
1 5 10
Leu

(2) INFORMATION FOR SEQ ID NO: 313:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 15
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 313:

Asp Arg Val Tyr Ile His Pro Phe His Leu Leu Tyr
1 5 10
His Asn Lys
15

00001976:064504

(2) INFORMATION FOR SEQ ID NO: 314:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 314:

Asp Arg Val Tyr Ile His Pro Phe His Leu Leu Tyr
1 5 10
Tyr Ser Lys
15

(2) INFORMATION FOR SEQ ID NO: 315:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 315:

Asp Arg Val Tyr Ile His Pro Phe His Leu Val Ile
1 5 10
His Asn Glu
15

(2) INFORMATION FOR SEQ ID NO: 316:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 316:

Glu Asn Pro Ser Val Glu Thr Leu Pro Glu Ser Thr
1 5 10
Phe

(2) INFORMATION FOR SEQ ID NO: 317:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 317:

00001076-0000

Asn Ile Gly Asp Thr Asn Pro Arg Val Gly Glu
1 5 10

(2) INFORMATION FOR SEQ ID NO: 322:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 322:

Glu Leu Glu Ala Asp Glu Arg Glu Pro Thr Glu
1 5 10

(2) INFORMATION FOR SEQ ID NO: 323:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 323:

Asp Gly Trp Arg Arg Met Pro
1 5

(2) INFORMATION FOR SEQ ID NO: 324:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 6
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 324:

Asp Arg Arg Arg Met Pro
1 5

(2) INFORMATION FOR SEQ ID NO: 325:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 325:

00999-92648800

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 329:

Arg Glu Ile Leu Glu Glu Arg Gly
1 5

(2) INFORMATION FOR SEQ ID NO: 330:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 12
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 330:

Arg Leu Gly Pro Glu Trp Ser Gln Pro Met Lys Arg
1 5 10

(2) INFORMATION FOR SEQ ID NO: 331:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 12
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 331:

Arg Ile Ser Ala Glu Trp Gly Glu Phe Ile Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 332:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 12
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 332:

Arg Ile Ser Ala Glu Trp Gly Glu Phe Ile Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 333:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 12
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 333:

00001977-0000

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 337:

Lys	Glu	Asp	Val	Phe	Ser	Phe	Ser	Phe	Tyr	Tyr	Asn
1				5					10		
Arg	Asp	Ser	Glu	Asn							
		15									

(2) INFORMATION FOR SEQ ID NO: 338:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 338:

Lys	Glu	Glu	Val	Phe	Ser	Val	Tyr	Tyr	Asn	Arg	Gly
1				5					10		
Ser	His										

(2) INFORMATION FOR SEQ ID NO: 339:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 339:

Asp	Pro	Gln	His	Tyr	Glu	Gly	Asn	Phe	His
1				5					10

(2) INFORMATION FOR SEQ ID NO: 340:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 340:

Glu	Lys	Leu	Met	Glu	Ala	Leu	Gly	Ala	Lys	Lys	Arg
1				5					10		
Leu	Phe	Asp									
		15									

(2) INFORMATION FOR SEQ ID NO: 341:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15

00004976-0400

(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 341:

Gln Leu Ile Met Gln Ala Leu Gly Val Lys Glu Lys
1 5 10
Arg Ala Asn
15

(2) INFORMATION FOR SEQ ID NO: 342:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 15
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 342:

Lys Leu Ile Met Gln Ala Leu Gly Ala Lys Glu Lys
1 5 10
Arg Ile Glu
15

(2) INFORMATION FOR SEQ ID NO: 343:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 343:

Asp Tyr Val Phe Gln Glu Ser Tyr Ser Ser Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 344:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 344:

Asp Tyr Val Gln Lys Asn Pro Phe Arg Asn Asp Asp
1 5 10

(2) INFORMATION FOR SEQ ID NO: 345:

0000107 061000

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 345:

Asp	Tyr	Val	Gln	Tyr	Pro	Asn	Arg	Arg	Asp	Lys
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 346:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 346:

Arg	Lys	Phe	Tyr	Thr	Glu	Phe	Asp	Arg	Arg	Asn	Asn
1				5					10		

Arg

(2) INFORMATION FOR SEQ ID NO: 347:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 347:

Arg	Lys	Phe	Tyr	Thr	Glu	Phe	Asp	Arg	His	Asn	Asn
1				5					10		

Arg

(2) INFORMATION FOR SEQ ID NO: 348:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 348:

Arg	Lys	Phe	Tyr	Thr	Glu	Phe	Asp	Arg	His	Asn	Asn
1				5					10		

Arg

00004976 064504

Parameter	Estimate	Standard Error	t-Statistic	p-Value	95% Confidence Interval
Intercept	1.0000	0.0000	1.0000	1.0000	1.0000
Age	0.0000	0.0000	0.0000	1.0000	0.0000
Gender	0.0000	0.0000	0.0000	1.0000	0.0000
Education	0.0000	0.0000	0.0000	1.0000	0.0000
Income	0.0000	0.0000	0.0000	1.0000	0.0000
Health	0.0000	0.0000	0.0000	1.0000	0.0000
Marital	0.0000	0.0000	0.0000	1.0000	0.0000
Religion	0.0000	0.0000	0.0000	1.0000	0.0000
Occupation	0.0000	0.0000	0.0000	1.0000	0.0000
Residence	0.0000	0.0000	0.0000	1.0000	0.0000
Time	0.0000	0.0000	0.0000	1.0000	0.0000
Constant	0.0000	0.0000	0.0000	1.0000	0.0000

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Arg 1	Tyr	Leu	Glu	Leu 5	Arg	Glu	Ala	Ala	Asp 10	Tyr	Asp
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(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Arg Tyr Leu Glu Val Gln Glu Ala Ala Val Tyr Asp
1 5 10

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Lys Arg Asp Val Ala Gly Glu Gln Pro Tyr Arg Arg
1 5 10

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Lys Arg Asn Leu Ala Glu Glu Gln Pro Tyr Arg Arg
1 5 10

